

What is claimed is:

1. An electronic part mounting apparatus for mounting an electronic part on a substrate, comprising:

5 a chamber for cleaning a substrate and an electronic part by plasma;

a conveying mechanism for conveying said electronic part and said substrate from said chamber into atmospheric air;

10 a mounting mechanism for receiving said electronic part and said substrate from said conveying mechanism and for mounting said electronic part on said substrate in a state that said electronic part and said substrate are exposed in the atmospheric air.

15

2. An electronic part mounting apparatus according to claim 1,

wherein said mounting mechanism includes a part holder for holding said electronic part, a substrate holder for holding 20 said substrate, and a moving mechanism for moving said part holder relative to said substrate holder, and

one of said part holder and said substrate holder includes a heating portion for heating objects to be held after said electronic part is mounted on said substrate.

25

3. An electronic part mounting apparatus according to claim 2, wherein heating operation of said heating portion is stopped in the middle of temperature increasing of said objects to be held.

5

4. An electronic part mounting apparatus according to claim 2, wherein both said part holder and said substrate holder include said heating portions.

10 5. An electronic part mounting apparatus according to any of claims 1, further comprising an ultrasonic vibration source for applying an ultrasonic vibration to said part holder.

15 6. A method of mounting an electronic part on a substrate comprising the steps of:

cleaning said substrate and said electronic part by plasma; and

20 mounting said electronic part on said substrate in a state that said electronic part and said substrate are exposed in atmospheric air.

7. A method of mounting an electronic part on a substrate according to claim 6, wherein said mounting step is executed within 10 minutes after said cleaning step is executed and 25 said electronic part and said substrate are put in the atmospheric air.

8. A method of mounting an electronic part on a substrate according to claim 6, wherein said mounting step is executed within 5 minutes after said cleaning step is executed and said 5 electronic part and said substrate are put in the atmospheric air.

9. A method of mounting an electronic part on a substrate according to claim 6, wherein said mounting step is executed 10 within 3 minutes after said cleaning step is executed and said electronic part and said substrate are put in the atmospheric air.

10. A method of mounting an electronic part on a substrate 15 according to claim 6, further comprising a step of heating either of said electronic part and said substrate after said cleaning step is executed.